Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

CLASSIFICATION CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY Orbit countries

SUBJECT Scientific - Miscellaneous

HOW PUBLISHED Newspapers, periodicals

WHERE PUBLISHED As indicated

DATE PUBLISHED 7 Jul 1953-9 Apr 1954

LANGUAGE Various

DATE OF INFORMATION 1953-1954

DATE DIST. 25 May 1954

NO. OF PAGES 8

SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE As indicated

NEWS ITEMS ON SCIENCE IN ORBIT COUNTRIES

Number 2

Agriculture

SOVIETS DEVELOP NEW TYPE OF PEANUT -- Rotterdam, Handels & Transport Courant, 23 Mar 54

Soviet agronomists have developed a new strain of peanut for planting north of the Caucasus Mountains and in the southern Ukraine. This strain is said to produce not only twice as many nuts but also nuts with a higher oil content.

A large number of machines have already been developed for peanut planting, cultivating, harvesting, and processing.

Astronomy

NEW SOVIET ASTRONOMICAL INSTRUMENTS -- Alma-Ata, Kazakhstanskaya Pravda, 4 Oct 53

Scientists at the astronomical observatory of Kiev State University have begun observations with a new instrument to determine the transparency of the atmosphere.

This instrument, one of many developed by the observatory's scientists, will be used for observing the eclipse of the sun on 30 June 1954. The observatory's workshop is now making large and complicated mobile spectroscopes which will be used to study the distribution of chemical elements in the sun's atmosphere. The workshop is also building a huge stationary heliospectroscope for studying various physical phenomena on the sun under normal conditions.

CLASSIFICATION CONFIDENTIAL

STATE		NAVY		NSRB		DISTRIBUTION							
ARMY		AIR		FBI									

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

Biology

STERILITY IN BULGARIAN DOMESTIC ANIMALS -- Sliven, Slivensko Delo, 12 Feb 54

An article by Dr Stoyan Kutulov discusses the serious problem of sterility of domestic animals in Bulgaria and measures for improving the raising of livestock.

[Further details available.]

FIGHT AGAINST BRUCELLOSIS IN BULGARIA -- Turnovo, Borba, 13 Feb 54

An article by Dr El. Neftyanova, senior scientific associate of a precinct veterinary institute (rayonen veter. institut), discusses the symptoms and effects of brucellosis and the measures for combating it.

[Further details available.]

Chemistry

BULGARIAN CHEMICAL INDUSTRY -- Sofia, Rabotnichesko Delo, 23 Feb 54

An article by Professor St. Tutsov, Docent E. Gerasimov, and assistant M. Marinov, instructors at the Higher Chemical-Technological Institute, urges the production of foam glass on a pilot-plant scale.

Sofia, Rabotnichesko Delo, 23 Feb 54

An article by George Monev, chairman of the Scientific Section of Industrial Chemistry of the Union of Scientific Research, reports on the efforts to produce products such as cellulose, artificial fabrics, and chemicals from wood and straw.

[Further details available.]

Electricity

MODEL OF NOVOSIBIRSK HYDROELECTRIC POWER STATION -- Moscow, Bloknot Agitatora, Mar 54

A large model of the Novosibirsk Hydroelectric Power Station, comprising the power station building, concrete spillway dam, earthen dam, navigable canal, and three-chamber lock, as well as sectors of the river adjacent to the complex, has been built by the All-Union Institute of Hydraulic Engineering to facilitate construction of the project. This hydroelectric power center, to be one of the largest in Western Siberia, is under construction on the Ob' River, 30 kilometers from Novosibirsk.

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

Geography

GEODETIC AND CARTOGRAPHIC WORK IN HUNGARY -- Budapest, Magyar Kozlony, 16 Dec 53

Decree No 57 of 16 December 1953, issued by the Hungarian Council of Ministers, requires all institutes, enterprises, and other agencies to report geodetic and cartographic work performed by them, except work performed for national defense, to the appropriate Megye Geodetic Office (Megyei Foldmeresi Iroda). The National Geodetic and Cartographic Office (Allami Foldmeresi es Terkepeszeti Hivatal) is authorized to supervise the execution of this decree.

Medicine

SOVIETS PROVE ERYSIMIN A POWERFUL HEART TONIC -- Moscow, Meditsinskiy Rabotnik, 2 Mar 54

According to Professor A. Turova, V. Berezhinskaya, and P. Loshkarev, erysimin, a crystalline glycoside [prepared from the seeds of Erysimum aureum], is a powerful heart tonic. Investigations conducted at the All-Union Institute of Medicinal and Aromatic Plants showed that the biological activity of erysimin ranks it with the most effective of the glycosides in the digitalis group, and that its characteristics and speed of action resemble those of strophanthin. Clinical tests carried out at the Therapeutic Clinic of the Central Institute for the Advanced Training of Physicians and at the Therapeutic Clinic of the First Medical Institute clearly demonstrated the effectiveness of erysimin in the treatment of second- and third-degree cardiovascular deficiencies. Erysimin is recommended for use in such deficiencies, subject to the same limitations imposed on the use of strophanthin. Its use is especially recommended in cases where the use of digitalis or strophanthin would cause the rapid development of extrasystolic arrhythmia.

SOVIET UNDERPRODUCTION OF GALENICALS -- Moscow, Meditsinskiy Rabotnik, 30 Mar 54

Because of shortages in raw materials, inadequate collection facilities, and poor planning, the Minsk Galenical-Packing Laboratory met only one third of its planned production quota for 1953. The pharmaceutical network was not supplied with many of the medicaments used continually in medical practice. The efforts of the laboratory were devoted almost exclusively to the packaging of those medical preparations which require the least amount of care. Many of the needed raw materials are available locally, but nothing is being done to procure them. Shortcomings are general in the Belorussian SSR. The Grodno Laboratory, for example, produced only 54.3% of its 1953 production quota for galenical preparations.

AIR-AMBULANCE SYSTEM -- Moscow, Meditsinskiy Rabotnik, 18 Dec 53

A system of air-ambulance stations has been set up in the USSR to service outlying areas. In emergencies, patients are flown to centrally located hospitals for treatment. Medical workers, including various types of specialists, and surgeons answer emergency calls by air. In addition, physicians are flown from one locale to another as part of a regular program to provide the population with expert medical care. In 1953, medical workers from the republic and

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

oblast air medical stations in Kiev and vicinity treated 114,000 persons. With the use of portable X-ray machines, more than 25,000 X-ray examinations were carried out. Most of the air-ambulance stations have at their disposal an airplane equipped as a flying laboratory, and scientific research personnel can be sent where needed in response to local requests.

TO INCREASE COMPENSATION TO BLOOD DONORS IN BULGARIA -- Sofia, Izvestiya, 6 Oct 53

Decree No 621, 28 September 1953, of the Bulgarian Council of Ministers provides for increased compensation to blood donors.

[Further details available.]

COMPULSORY HEALTH INSPECTION OF WORKERS IN BULGARIAN FOOD INDUSTRY -- Sofia, Izvestiya, 29 Jan 54

The Ministry of Health and Social Welfare has issued regulations for the monthly inspection of workers in the food industry, the medical industry, and the water-supply services. These regulations define the types of inspections that must be conducted and the diseases which disqualify personnel from holding positions mentioned in the regulation.

[Further details available.]

Metals

CZECHOSLOVAKIA DEVELOPS NEW TYPE OF STEEL -- Hanover, Hannoversche Presse, 9 Apr 54

The "Klement Gottwald" steel mill at Vitkovice is producing a new type of rustproof sheet steel for use in the chemical industry. The center of the sheet is made of ordinary iron, while only the outer layers are made of high-grade steel. This method is said to effect a 75 percent saving in high-grade steel previously used for this purpose.

Mining

NEW POLISH BLASTING CAP -- Lille, Le Nord Industriel et Commercial, 13 Mar 54

Polish industry is manufacturing magnetic blasting caps which are replacing electromagnetic blastings caps in mining. The new caps guarantee complete safety of operation. First tests of the special caps, which were designed for mines with gas pockets, have been successful. The new caps completely eliminate sparks and preclude any danger from firedamp explosions.

Nuclear Physics

CZECH REFUGEE TELLS OF SOVIET NUCLEAR CENTERS, CZECH URANIUM MINING -- Stockholm, Svenska Dagbladet, 5 Mar 54

[The following information is from one of a series of articles by "Josef Novak," (a pseudonym), a Czech refugee who spent 6 years (1947-1953) in the USSR as a member of a Czech industrial delegation, according to Svenska Dagbladet.]

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

Novak became acquainted with Sergey T. Kutebov, director of the atomic center in Tannu-Tuva [Tuva Autonomous Oblast]. In February 1953, Kutebov told Novak that within 18 months the USSR should have passed the US in the hydrogen bomb [production?]. Kutebov also said that Soviet scientists were in possession of complete details of the American atomic bomb as early as 7 months before the first one was exploded. It was also Kutebov's opinion that the USSR had gained at least 2 years in its atomic program through espionage in Western countries. Through Kutebov, Novak became rather well acquainted with Mrs. Bruno Pontecorvo, whose husband is now employed at the Tadzhikistan Atomic Plant at Stalinabad.

Besides the two atomic centers mentioned above, the USSR has atomic centers at Spertlitamsk [sic; probably Sterlitamak], at Sochi in the Caucasus, and in the Pamirs near the Afghan border. Two new atomic bomb plants were built in 1951 on the west shore of Lake Baykal and another plant has been built since the fall of 1952 in Central China (?) [question mark appears in source]. Plutonium reactors are manufactured on [the banks of] the Ledan River and in Petrovsk in the Transbaykal region.

[Further details available].

Stockholm, Svenska Dagbladet, 17 Mar 54

[The following information is taken from one of a series of articles written under the pseudonym "Josef Novak," a Czech refugee who, according to the source, in 1953 spent some time as a slave laborer in the St. Joachimsthal [Jachymov] uranium mines in Czechoslovakia.]

Czechoslovakia's resources of uranium ore are the world's fourth largest. Mining is done in two areas: St. Joachimsthal and Pribram. About 45,000 slave laborers work at St. Joachimsthal. Only the technicians and foremen are regularly employed. The daily norm per worker is "65 centimeters forward and 2 meters high." Before World War II, there were only three small mines in the St. Joachimsthal region, all of which were worked for radium. At present there are ten times as many mines and all are producing uranium exclusively. The ore is packed in metal boxes at the mines and is shipped under strict security provisions to the USSR. The entire Czech uranium industry, at Pribram as well as at St. Joachimsthal, is under the guidance of Soviet specialists and engineers and is subordinate to a state company which formally is under the government in Prague. However, the entire production goes to the USSR.

[Further details available.]

Radio and Television

INCREASED RADIO FACILITIES IN MONGOLIA, HUNGARY, ALBANIA -- Moscow, Radio, Oct 53

From 1940 to 1952, radio transmitters in the Mongolian People's Republic increased 150% in number and 220% in power; radio-relay centers increased 205% in number and 550% in power; and the number of wired radio centers increased 233%.

In Hungary, a new station operates on the 223.8-meter band. Hungary plans to construct 125,000 new wired radio centers in 1953.

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

The number of radio receivers in Albania is six times greater than in 1938.

Scientists

OBITUARY NOTICE OF LEONID IVANOVICH PRASOLOV -- Moscow, Vestnik Akademii Nauk SSSR, Feb 54

Academician L. I. Prasolov, prominent Soviet soil scientist, died on 13 January 1954. Prasolov began his scientific work at the end of the 19th Century as a student of V. V. Dokuchayev. His work included studies of the soils of Povolzh'ye, the Don steppe, the Caucasus, Central Asia, Kazakhstan, and Siberia. Soil maps of the USSR and of the whole world were produced under his guidance. He was director of the Institute of Soils imeni V. V. Dokuchayev, editor of the periodical Pochvovedeniye (Soil Science) and president of the All-Union Society of Soil Scientists. He was awarded a Stalin Prize and the Gold Medal imeni V. V. Dokuchayev for his scientific work, as well as three Orders of Lenin, the Order of Labor Red Banner, and medals of the USSR.

Scientific Organization

DECREE ON BULGARIAN SCIENTIFIC RESEARCH INSTITUTES -- Sofia, Izvestiya, 7 Jul 53

On 24 June 1953, the Bulgarian Council of Ministers issued Decree No 940, which established regulations for scientific research institutes connected with industrial and other organizations performing scientific research work in Bulgaria. This decree provides regulations governing the general conditions, planning and accounting, management, and scientific councils of scientific research institutes in Bulgaria.

[Further details available]

BIOLOGICAL INSTITUTE AT BULGARIAN ACADEMY OF SCIENCES -- Sofia, Priroda, Jul-Aug 53

The history and development of the Biological Institute at the Bulgarian Academy of Sciences are discussed.

[Further details available. Source includes a photograph of the central building of the academy's biological institute.]

NEW GDR SCIENTIFIC SOCIETY -- Duesseldorf, Freies Volk, 29 Mar 54

A new scientific society, the Medical Scientific Society for Roentgenology in the GDR (Medizinisch-Wissenschaftliche Gesellschaft fuer Roentgenologie in der Deutschen Demokratischen Republik), was recently founded in East Berlin. Professor Dr Gietzelt, president of the Institute for Roentgenology and Radiology (Institut fuer Roentgenologie und Radiologie) of Humboldt University in East Berlin, was elected chairman of the new society.

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

ANNOUNCE POLISH CONGRESS OF PEDIATRICIANS -- Warsaw, Acta Physiologica Polonica, 1st Quarter, 1954

The Organizational Committee has announced that the Tenth Polish National Congress of Pediatricians will be held in Szczecin on 9, 10, and 11 September 1954.

FIRST NATIONAL CONGRESS OF POLISH STOMATOLOGISTS -- Warsaw, Czasopismo Stomatologiczne, Mar 54

The First National Congress of Polish Stomatologists was held in Warsaw on 21, 22, and 23 November 1953. The aims of the congress were to review the achievements of Polish stomatology during the postwar period, to determine the direction of future work, and to elect officers for the Stomatological Society. Professor A. Ujejski was elected chairman of the Main Administration of the Stomatological Society.

POLAND REPORTS FIRST GRADUATION AT SLASK MEDICAL ACADEMY -- Warsaw, Polski Tygodnik Lekarski, 22 Mar 54

The Slask Medical Academy in Zabrze-Rokitnica held its first graduation on 21 February 1954. The 140 graduates received their medical diplomas from Dr B. Kozusznik, Deputy Minister of Health.

Notes on Scientific Publications

LISTS BULGARIAN TECHNICAL BOOKS TO BE PUBLISHED IN 1954 -- Sofia, Tekhnichesko Delo, 18 Sep 53

Ninety-nine technical books to be published in 1954 are listed. The books are in the fields of general scientific research, transportation, industrial electrical and power engineering, construction and architecture, and other scientific and academic fields.

1954 WORK PLAN OF SOVIET SCIENTIFIC PERIODICAL -- Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, Jan 54

Although the majority of dangerous epidemic diseases have been eliminated in the USSR, scarlet fever, measles, whooping cough, influenza, dysentery, and rheumatism are still important in relation to the total incidence of disease. The issues of this periodical for 1954 will contain information on the following subjects: No 1 -- general microbiology, epidemiology, and immunobiology, as well as brucellosis; No 2 -- modification of microorganisms, immunity, and tularemia; No 3 -- children's infectious diseases; No 4 -- dysentery; No 5 -- problems of epidemiology, microbiology, and immunity; No 6 -- intestinal infections; No 7 -- rickettsioses; No 8 -- prophylaxis and specific therapy of infectious diseases; No 9 -- virus diseases, particularly influenza; No 10 -- modification of microorganisms and virus diseases; No 11 -- methods for production of bacterial preparations and antibiotics and use of these products against infectious diseases; No 12 -- the most important infections not treated in other issues. Articles exposing antiscientific and idealistic concepts, particularly those of bourgeois scientists, will be published on a priority basis without regard to the general contents of individual issues.

- E N D -

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1

50X1-HUM

Page Denied

Sanitized Copy Approved for Release 2011/09/14 : CIA-RDP80-00809A000700180360-1